

REMARKS

This responds to the final Office Action mailed on 23 November 2009. Claims 1 and 3-44 are currently pending and under consideration in the application.

Claim Rejections – 35 U.S.C. § 103

Claims 43 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,860,895 to Akerfeldt et al. Applicants respectfully traverse the rejection.

Claim 43 recites “an automatic driving mechanism . . . comprises a transducer for effecting movement of the tamping tube toward the sealing plug upon withdrawal of the closure device from the tissue wall puncture, the transducer comprising: an electronic switch at the proximal end of the closure device; and a motor operatively connected to the electronic switch, wherein retraction of the closure device from the tissue wall puncture trips the electronic switch and activates the motor to move the tamping tube toward the sealing plug.”

The Examiner asserts that the feature 32 disclosed by Akerfeldt is a transducer, and that while Akerfeldt does not teach an electronic switch, “it is well known in the art to use an electronic switch as using electric power is well-known substitution for manual power (this makes the using the device easier for the user). Moreover, it has been held that providing an automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art.” Applicants respectfully disagree.

Akerfeldt is completely silent as to the use of a transducer comprising an electronic switch *and* motor for effecting movement of the tamping tube that is activated “upon withdrawal of the closure device from the wall puncture.” There is no teaching or suggestion in Akerfeldt of

using any electronics such as an electronic switch and a motor as part of the insertion tool 101, much less an electronic switch and motor that are operable upon the manual activity of withdrawal of the device from the tissue wall puncture. Therefore, one of ordinary skill in the art would have no motivation when looking to the Akerfeldt device to provide the transducer of claim 43 in a tissue puncture closure device.

Furthermore, Akerfeldt fails to disclose or suggest any feature that “trips” another feature (e.g., a switch of any type) to “activate” operation of another feature (e.g., a motor) to drive the tamping tube. The Akerfeldt device includes a gear mechanism 32 housed within a hollow casing 30. The gear mechanism 32 is moved distally in the casing 30 using a pusher 36 that advances a distal plug member 2 through the vessel puncture and into an interior of the vessel 20. The casing is then withdrawn proximally, which moves a pair of pulleys 38, 40 toward each other and advances an outer feeding means 33 to move a proximal plug member 3 toward the distal plug member 2 to close and seal the vessel puncture. Thus, no “tripping” action is required to advance the proximal plug member 3 in the Akerfeldt device. Akerfeldt fails to disclose a combination of manual and electronic features

The Examiner has provided no support for the assertion that electronic components, in particular an electronic switch and motor activated by an electronic switch, are obvious for use in a tissue puncture closure system. The Examiner has not established a *prima facie* case of obviousness concerning the specific limitations of claim 43 that “retraction of the closure device from the tissue wall puncture trips the electronic switch,” or that the motor, as opposed to other devices (whether mechanical or electrical), “moves the tamping tube toward the sealing plug” after being activated by the tripped electronic switch.

In view of the above, Applicants submit that Akerfeldt fails to disclose or render obvious every limitation of claim 43 and the claims that depend from it.

Double Patenting Rejection

Claims 1 and 3-44 stand rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over copending U.S. Application Nos. 11/130,895 and 11/103,257. Claims 1 and 3-44 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 7,618,436. Claims 1 and 3-44 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent no. 7,618,438. Claims 1 and 3-44 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-35 of U.S. Patent No. 7,250,057. Applicants respectfully traverse these rejections. However, in an effort to expedite allowance of the present application, Applicants submit herewith Terminal Disclaimers directed to U.S. Application Nos. 11/130,895 and 11/103,257 and U.S. Patent Nos. 7,618,436; 7,618,438; and 7,250,057. Applicants respectfully request withdrawal of these double patenting rejections.

Conclusion

For at least the foregoing reasons, Applicants believe that each of the presently pending claims in this application is in immediate condition for allowance. Accordingly, Applicants respectfully request a favorable action on the merits. If there remain any unresolved issues, Applicants invite the Examiner to telephone the undersigned attorney to expedite the handling of this matter.


Applicants expressly disclaim all arguments, representations, and/or amendments presented or contained in any other patent or patent application, including any patents or patent applications claimed for priority purposes by the present application or any patents or patent applications that claim priority to this patent application. Moreover, all arguments, representations, and/or amendments presented or contained in the present patent application are only applicable to the present patent application and should not be considered when evaluating any other patent or patent application.

Respectfully submitted,

Date

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